UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,539	05/13/2002	Derek Edward Roberts	MARSP0125US	8840

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EXAMINER
SWEARINGEN, JEFFREY R

ART UNIT	PAPER NUMBER
2145	

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 February 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29 and 132* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29,132* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   The rejections under 35 U.S.C. 112, second paragraph and 35 U.S.C. 101 have been overcome.

2.   Applicant's arguments with respect to claims 1-29 and 132 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1-5, 7-17, 20-25, 27-29, and 132 are rejected under 35 U.S.C. 102(e) as being anticipated by Bhola et al. (US 6,321,252 B1).

5.   In regard to claims 1, 27-29 and 132, Bhola disclosed:

        generating, in and by the end-point application, and storing at least one code whose purpose is to associate an action with an address-based event in the information stream, which comprises data and associated memory addresses, on an information pathway within the computer; (column 4, lines 56-62)

        comparing the generated code at least with each one of the associated addresses to detect the address-based event; and (column 4, lines 62-67)

        performing the associated action in response to detection of the address-based event. (column 4, lines 62-67)

6.   In regard to claim 2, Bhola disclosed:

comparing the at least one generated code only with each of the associated addresses. (column

4, lines 53-67)

7.   In regard to claim 3, Bhola disclosed:

comparing the at least one generated code with each of the associated addresses and at least

part of the data. (column 4, lines 53-67)

8.   In regard to claim 4, Bhola disclosed:

the associated addresses are processed before being compared with the at least one generated

code. (column 5, lines 1-12)

9.   In regard to claim 5, Bhola disclosed:

the data have inferred addresses. (column 5, lines 6-9)

10.   In regard to claim 7, Bhola disclosed:

the information pathway is a computer bus. (A computer bus was inherent present in Bhola.)

11.   In regard to claim 8, Bhola disclosed:

the information pathway is a switch fabric. (Streaming as taught in column 4 inherently required a

switch fabric.)

12.   In regard to claim 9, Bhola disclosed:

the information stream is from a network of computers. (column 4, line 10)

13.   In regard to claim 10, Bhola disclosed:

the information stream is from a plurality of sources and is multiplexed. (column 4, lines 59-62)

14.   In regard to claim 11, Bhola disclosed:

the information stream is wholly within the computer. (column 4, lines 17-21)

15.   In regard to claim 12, Bhola disclosed:

each associated address represents a memory location or range of locations at the end-point

application. (column 4, lines 17-34)

16.   In regard to claim 13, Bhola disclosed:

the step (a) is performed by at least one application of the computer. (column 4, lines 56-62)

17.   In regard to claim 14, Bhola disclosed:

the at least one application includes the end-point application. (column 4, lines 56-62)

18.   In regard to claim 15, Bhola disclosed:

The step (b) is performed by a content-addressable memory. (inherent to Bhola)

19.   In regard to claim 16, Bhola disclosed:

the associated action comprises a plurality of associated actions. (column 4, lines 53-67)

20.   In regard to claim 17, Bhola disclosed:

the associated action comprises raising an interrupt for the end-point application. (Interrupts were

inherently present in the operations of Bhola. Interrupts are necessary for software operations.)

21.   In regard to claim 20, Bhola disclosed:

the associated action comprises incrementing an event counter. (column 5, lines 1-6)

22.   In regard to claim 21, Bhola disclosed:

the associated action comprises writing a predetermined value to a predetermined memory

location. (column 5, lines 6-10)

23.   In regard to claim 22, Bhola disclosed:

the associated action comprises deleting the at least one generated code. (column 5, lines 10-

12)

24.   In regard to claim 23, Bhola disclosed:

the associated action comprises modifying the at least one generated code. (column 5, lines 10-

12)

25.   In regard to claim 24, Bhola disclosed:

the associated action comprises generating and storing at least one further code. (column 5,

lines 13-23)

26.   In regard to claim 25, Bhola disclosed:

the associated action comprises rescheduling the end-point application. (column 6, lines 12-14)

Claim Rejections - 35 USC § 103

27.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

28.   Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bhola in view of Nichols et

al. (U.S. Patent No. 4,977,582).

29.   In regard to claim 6, Bhola is applied as in claim 5. Bhola failed to give support for data bursting.

However, Nichols, in the same field of art of interprocess communication, disclosed the ability for data

streams and bursts to be synchronized in a manner similar to Bhola. See Nichols, column 11, lines 11-

33. Nichols, column 11, lines 41-56. Nichols, column 12, lines 38-50. It would have been obvious to

one of ordinary skill in the art at the time of the invention to modify Bhola to support data bursts as shown

in Nichols for the purpose of supporting high speed traffic and large quantities of traffic through a network.

[Nichols, column 2, lines 1-47]

30.   Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bhola in view of

Zargham et al. (U.S. Patent No. 6,470,398).

31.   In regard to claim 26, Bhola is applied as in claim 1. Bhola failed to disclose waking up an

application. However, Zargham in the analogous field of interprocess communication disclosed waking

up processes when necessary responses for those processes appeared in the system. See Zargham,

column 7, lines 1-9. It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Bhola with the teachings of Zargham for the purpose of allowing processes to receive

the proper data, which is known as shown in Zargham, column 1, lines 54-65.

32.   Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhola in view of

Official Notice.

33.   In regard to claim 18, Bhola is applied as in claim 17. Bhola, Jr. failed to explicitly disclose the

interrupt was raised only if the end-point application was not running. However, Official Notice is taken

that one of ordinary skill in the art at the time of the invention would have prevented interrupts to a

program if that program was not resident in memory in order to have saved processor resources and increased system efficiency. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Bhola to only raise interrupts if a program had been operational in the system.

34.   In regard to claim 19, Bhola is applied as in claim 1. Bhola, Jr. failed to explicitly disclose setting a bit in a bitmap. However, Official Notice is taken that one of ordinary skill in the art at the time of the invention would have been able to alter a bitmap with a single bit of data. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bhola, Jr. with a bitmap.

Conclusion

35.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

36.	Wilkinson et al.	US 5,765,011
37.	Wilkinson et al.	US 6,094,715
38.	Alferness et al.	US 6,029,205
39.	Pruul et al.	US 5,165,031

40.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. Swearingen whose telephone number is (571) 272-3921. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on 571-272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason Cardone
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